

NATIONAL SCIENCE FOUNDATION

Federal Funds

RESEARCH AND RELATED ACTIVITIES

For necessary expenses in carrying out the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861–1875), and the Act to establish a National Medal of Science (42 U.S.C. 1880–1881); services as authorized by 5 U.S.C. 3109; maintenance and operation of aircraft and purchase of flight services for research support; acquisition of aircraft; and authorized travel; \$6,253,540,000, to remain available until September 30, 2013, of which not to exceed \$550,000,000 shall remain available until expended for polar research and operations support, and for reimbursement to other Federal agencies for operational and science support and logistical and other related activities for the United States Antarctic program: Provided, That receipts for scientific support services and materials furnished by the National Research Centers and other National Science Foundation supported research facilities may be credited to this appropriation.

Note.—A full-year 2011 appropriation for this account was not enacted at the time the budget was prepared; therefore, this account is operating under a continuing resolution (P.L. 111–242, as amended). The amounts included for 2011 reflect the annualized level provided by the continuing resolution.

Program and Financing (in millions of dollars)

Identification code 49–0100–0–1–999	2010 actual	CR	2012 est.
Obligations by program activity:			
0001 Biological Sciences	715	715	795
0002 Computer and Information Science and Engineering	619	619	728
0003 Engineering	776	744	908
0004 EPSCoR	167	148	161
0005 Geosciences	892	890	979
0006 Mathematical and Physical Sciences	1,384	1,352	1,433
0007 Social, Behavioral and Economic Sciences	256	256	301
0008 Office of International Science and Engineering	48	48	58
0009 U.S. Polar Research Programs	386	381	409
0010 U.S. Antarctic Logistical Support Activities	68	68	68
0011 Integrative Activities	528	128	176
0012 Office of Cyberinfrastructure	215	214	236
0013 Arctic Research Commission	2	2	2
0091 Direct program activities, subtotal	6,056	5,565	6,254
0801 Reimbursable programs	96	120	120
0900 Total new obligations	6,152	5,685	6,374
Budgetary Resources:			
Unobligated balance:			
1000 Unobligated balance brought forward, Oct 1	482	1	.....
1021 Recoveries of prior year unpaid obligations	12	.....	.....
1050 Unobligated balance (total)	494	1	.....
Budget authority:			
Appropriations, discretionary:			
1100 Appropriation	5,618	5,618	6,254
1120 Appropriations transferred to other accounts	–54	–54	.....
1160 Appropriation, discretionary (total)	5,564	5,564	6,254
Spending authority from offsetting collections, discretionary:			
1700 Collected	82	120	120
1701 Change in uncollected payments, Federal sources	14	.....	.....
1750 Spending auth from offsetting collections, disc (total)	96	120	120
1900 Budget authority (total)	5,660	5,684	6,374
1930 Total budgetary resources available	6,154	5,685	6,374
Memorandum (non-add) entries:			
1940 Unobligated balance expiring	–1	.....	.....
1941 Unexpired unobligated balance, end of year	1	.....	.....
Change in obligated balance:			
Obligated balance, start of year (net):			
3000 Unpaid obligations, brought forward, Oct 1 (gross)	9,138	9,787	8,759
3010 Uncollected pymts, Fed sources, brought forward, Oct 1	–81	–91	–91
3020 Obligated balance, start of year (net)	9,057	9,696	8,668
3030 Obligations incurred, unexpired accounts	6,152	5,685	6,374
3031 Obligations incurred, expired accounts	1	.....	.....
3040 Outlays (gross)	–5,466	–6,713	–6,042
3050 Change in uncollected pymts, Fed sources, unexpired	–14	.....	.....
3051 Change in uncollected pymts, Fed sources, expired	4	.....	.....
3080 Recoveries of prior year unpaid obligations, unexpired	–12	.....	.....
3081 Recoveries of prior year unpaid obligations, expired	–26	.....	.....

Obligated balance, end of year (net):			
3090 Unpaid obligations, end of year (gross)	9,787	8,759	9,091
3091 Uncollected pymts, Fed sources, end of year	–91	–91	–91
3100 Obligated balance, end of year (net)	9,696	8,668	9,000
Budget authority and outlays, net:			
Discretionary:			
4000 Budget authority, gross	5,660	5,684	6,374
Outlays, gross:			
4010 Outlays from new discretionary authority	885	1,233	1,371
4011 Outlays from discretionary balances	4,581	5,480	4,671
4020 Outlays, gross (total)	5,466	6,713	6,042
Offsets against gross budget authority and outlays:			
Offsetting collections (collected) from:			
4030 Federal sources	–85	–120	–120
Additional offsets against gross budget authority only:			
4050 Change in uncollected pymts, Fed sources, unexpired	–14	.....	.....
4052 Offsetting collections credited to expired accounts	3	.....	.....
4060 Additional offsets against budget authority only (total)	–11	.....	.....
4070 Budget authority, net (discretionary)	5,564	5,564	6,254
4080 Outlays, net (discretionary)	5,381	6,593	5,922
Mandatory:			
4090 Budget authority, gross .....	.....	.....	.....
4180 Budget authority, net (total)	5,564	5,564	6,254
4190 Outlays, net (total)	5,381	6,593	5,922

Summary of Budget Authority and Outlays (in millions of dollars)

	2010 actual	CR	2012 est.
Enacted/requested:			
Budget Authority	5,564	5,564	6,254
Outlays	5,381	6,593	5,922
Legislative proposal, subject to PAYGO:			
Budget Authority .....	.....	.....	150
Outlays .....	.....	.....	150
Total:			
Budget Authority	5,564	5,564	6,404
Outlays	5,381	6,593	6,072

The Research and Related Activities appropriation enables the United States to provide leadership and promote progress across the expanding frontiers of scientific and engineering research and education.

The major research program activities of NSF are:

Biological Sciences.—This activity promotes scientific progress in biology through support of research on all levels, including molecules, cells, organisms, and ecosystems. This activity also supports a comprehensive research initiative on plant genomes, including research on economically significant crops.

Computer and Information Science and Engineering.—This activity supports research within and across the many sub-fields of computing, contributing to the education and training of computing professionals and informing the preparation of a U.S. workforce with computing competencies essential to success in an increasingly competitive, global market.

Engineering.—Research supported by this activity aims to increase U.S. engineering capability and strength, and focus that capability and strength on areas that are relevant to national problems and long-term needs. This activity also includes small business innovation research.

Geosciences.—This activity supports research and associated infrastructure to advance knowledge of the properties and dynamics of the planet on which we live. Research includes understanding the causes and implications of climate change, as well as disruptive processes such as earthquakes and storms.

Mathematical and Physical Sciences.—Research in this activity is directed at increasing understanding of natural laws and phenomena across the astronomical sciences, chemistry, materials sciences, physics, and mathematical sciences. This

RESEARCH AND RELATED ACTIVITIES—Continued

fundamental research provides the long-term underpinnings for advances in areas such as sustainable energy and economic competitiveness.

Social, Behavioral, and Economic Sciences.—This activity supports research, education, and infrastructure in the social, behavioral, cognitive, and economic sciences and funds the collection and dissemination of statistics on the science and engineering enterprise.

Office of International Science and Engineering.—This activity promotes an integrated strategy for international science and engineering which complements and enhances NSF's broader research and education goals and which facilitates international collaboration.

U.S. Polar Research Programs.—This activity supports Arctic and Antarctic research and operational science support and other related activities for United States polar research programs.

U.S. Antarctic Logistical Support Activities.—This activity provides funding to reimburse Federal agencies for logistical and other related activities supported by the United States Antarctic Program.

Integrative Activities.—This activity supports emerging cross-disciplinary research efforts and major research instrumentation. This activity also provides support for the Science and Technology Policy Institute. The Experimental Program to Stimulate Competitive Research broadens participation of States and regions in science and engineering by helping institutions expand their research capacity and competitiveness.

Office of Cyberinfrastructure.—This activity supports research, development, acquisition, and operation of advanced shared and connecting cyberinfrastructure in support of the Nation's science and engineering research and education community.

The United States Arctic Research Commission promotes Arctic research and recommends national Arctic research policies to guide Federal agencies in developing and implementing their research programs in the Arctic region.

The President's Wireless Innovation and Infrastructure Initiative (WI3) proposes to reallocate a total of 500 megahertz of Federal agency and commercial spectrum bands over the next 10 years in order to increase Americans access to wireless broadband. The auctions of reallocated spectrum licenses are expected to raise more than \$27 billion by 2021. Repurposing spectrum will greatly facilitate access for smart phones, portable computers, and innovative technologies that are on the horizon. This effort will also enhance America's public safety, infrastructure, and competitiveness by investing some of the expected spectrum auction receipts in the creation of a broadband network for public safety, expanding access to wireless broadband in rural America, and a Wireless Innovation (WIN) Fund to help develop cutting edge wireless technologies. NSF will participate in the WIN Fund by supporting targeted research on experimental wireless technology testbeds, more flexible and efficient use of the radio spectrum, and cyber-physical systems such as wireless sensor networks for smart buildings, roads, and bridges.

Object Classification (in millions of dollars)

Identification code 49-0100-0-1-999	2010 actual	CR	2012 est.
Direct obligations:			
21.0 Travel and transportation of persons	22	21	21
25.1 Advisory and assistance services	96	96	96
25.2 Other services from non-federal sources	5	5	5
25.3 Other goods and services from federal sources	29	23	23
25.4 Operation and maintenance of facilities	359	435	435
25.5 Research and development contracts	7	14	14
26.0 Supplies and materials	2	1	1

31.0 Equipment	1	1	1
41.0 Grants, subsidies, and contributions	5,535	4,969	5,658
99.0 Direct obligations	6,056	5,565	6,254
99.0 Reimbursable obligations	96	120	120
99.9 Total new obligations	6,152	5,685	6,374

Employment Summary

Identification code 49-0100-0-1-999	2010 actual	CR	2012 est.
1001 Direct civilian full-time equivalent employment	3	4	3

RESEARCH AND RELATED ACTIVITIES

(Legislative proposal, subject to PAYGO)

Program and Financing (in millions of dollars)

Identification code 49-0100-4-1-999	2010 actual	CR	2012 est.
Obligations by program activity:			
0101 Wireless Innovation Fund Research			150
0900 Total new obligations (object class 41.0)			150
Budgetary Resources:			
Budget authority:			
Appropriations, mandatory:			
1200 Appropriation			150
1930 Total budgetary resources available			150
Change in obligated balance:			
3030 Obligations incurred, unexpired accounts			150
3040 Outlays (gross)			-150
Obligated balance, end of year (net):			
3090 Unpaid obligations, end of year (gross)			
Budget authority and outlays, net:			
Mandatory:			
4090 Budget authority, gross			150
Outlays, gross:			
4100 Outlays from new mandatory authority			150
4180 Budget authority, net (total)			150
4190 Outlays, net (total)			150

MAJOR RESEARCH EQUIPMENT AND FACILITIES CONSTRUCTION

For necessary expenses for the acquisition, construction, commissioning, and upgrading of major research equipment, facilities, and other such capital assets pursuant to the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-1875), including authorized travel, \$224,680,000, to remain available until expended.

Note.—A full-year 2011 appropriation for this account was not enacted at the time the budget was prepared; therefore, this account is operating under a continuing resolution (P.L. 111-242, as amended). The amounts included for 2011 reflect the annualized level provided by the continuing resolution.

Program and Financing (in millions of dollars)

Identification code 49-0551-0-1-251	2010 actual	CR	2012 est.
Obligations by program activity:			
0001 Direct program activity	312	126	225
Budgetary Resources:			
Unobligated balance:			
1000 Unobligated balance brought forward, Oct 1	204	9	
Budget authority:			
Appropriations, discretionary:			
1100 Appropriation	117	117	225
1930 Total budgetary resources available	321	126	225
Memorandum (non-add) entries:			
1941 Unexpired unobligated balance, end of year	9		
Change in obligated balance:			
Obligated balance, start of year (net):			
3000 Unpaid obligations, brought forward, Oct 1 (gross)	442	597	293

3030	Obligations incurred, unexpired accounts	312	126	225
3040	Outlays (gross)	-157	-430	-245
	Obligated balance, end of year (net):			
3090	Unpaid obligations, end of year (gross)	597	293	273

Budget authority and outlays, net:

4000	Discretionary:			
	Budget authority, gross	117	117	225
	Outlays, gross:			
4010	Outlays from new discretionary authority		7	14
4011	Outlays from discretionary balances	157	423	231
4020	Outlays, gross (total)	157	430	245
4180	Budget authority, net (total)	117	117	225
4190	Outlays, net (total)	157	430	245

The Major Research Equipment and Facilities Construction activity supports the acquisition, construction, and commissioning of unique national research platforms and major research facilities and equipment. Performance of each construction project is measured against an established baseline at regular intervals and at major milestones.

Object Classification (in millions of dollars)

Identification code 49-0551-0-1-251	2010 actual	CR	2012 est.
Direct obligations:			
25.5 Research and development contracts	5	5	5
41.0 Grants, subsidies, and contributions	307	121	220
99.9 Total new obligations	312	126	225

AGENCY OPERATIONS AND AWARD MANAGEMENT

For agency operations and award management necessary in carrying out the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-1875); services authorized by 5 U.S.C. 3109; hire of passenger motor vehicles; not to exceed \$9,000 for official reception and representation expenses; uniforms or allowances therefor, as authorized by 5 U.S.C. 5901-5902; rental of conference rooms in the District of Columbia; and reimbursement of the Department of Homeland Security for security guard services; \$357,740,000: Provided, That contracts may be entered into under this heading in fiscal year 2012 for maintenance and operation of facilities, and for other services, to be provided during the next fiscal year: Provided further, That of the funds made available under this heading, not less than \$1,960,000 is for strengthening the agency's acquisition workforce capacity and capabilities: Provided further, That such funds shall be available for training, recruitment, retention, and hiring members of the acquisition workforce as defined by the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 401 et seq.): Provided further, That such funds shall be available for information technology in support of acquisition workforce effectiveness or for management solutions to improve acquisition management: Provided further, That of the funds made available under this heading, \$44,650,000 shall remain available until expended for costs associated with the acquisition of headquarters space, including design, alteration, tenant improvement, and relocation.

Note.—A full-year 2011 appropriation for this account was not enacted at the time the budget was prepared; therefore, this account is operating under a continuing resolution (P.L. 111-242, as amended). The amounts included for 2011 reflect the annualized level provided by the continuing resolution.

Program and Financing (in millions of dollars)

Identification code 49-0180-0-1-251	2010 actual	CR	2012 est.
Obligations by program activity:			
0001 Administration and management	300	300	358
0801 Reimbursable programs	5	10	10
0900 Total new obligations	305	310	368
Budgetary Resources:			
Budget authority:			
1100 Appropriations, discretionary:			
Appropriation	300	300	358

1700	Spending authority from offsetting collections, discretionary:			
	Collected	5	10	10
1900	Budget authority (total)	305	310	368
1930	Total budgetary resources available	305	310	368

Change in obligated balance:

3000	Obligated balance, start of year (net):			
	Unpaid obligations, brought forward, Oct 1 (gross)	72	79	54
3010	Uncollected pymts, Fed sources, brought forward, Oct 1	-1		
3020	Obligated balance, start of year (net)	71	79	54
3030	Obligations incurred, unexpired accounts	305	310	368
3031	Obligations incurred, expired accounts	2		
3040	Outlays (gross)	-297	-335	-355
3051	Change in uncollected pymts, Fed sources, expired	1		
3081	Recoveries of prior year unpaid obligations, expired	-3		
	Obligated balance, end of year (net):			
3090	Unpaid obligations, end of year (gross)	79	54	67
3091	Uncollected pymts, Fed sources, end of year			
3100	Obligated balance, end of year (net)	79	54	67

Budget authority and outlays, net:

4000	Discretionary:			
	Budget authority, gross	305	310	368
	Outlays, gross:			
4010	Outlays from new discretionary authority	239	256	304
4011	Outlays from discretionary balances	58	79	51
4020	Outlays, gross (total)	297	335	355
	Offsets against gross budget authority and outlays:			
	Offsetting collections (collected) from:			
4030	Federal sources	-6	-10	-10
	Additional offsets against gross budget authority only:			
4052	Offsetting collections credited to expired accounts	1		
4070	Budget authority, net (discretionary)	300	300	358
4080	Outlays, net (discretionary)	291	325	345
4180	Budget authority, net (total)	300	300	358
4190	Outlays, net (total)	291	325	345

This account funds NSF's scientific, professional, and administrative workforce, the physical and technological infrastructure necessary for a productive, safe and secure work environment, and the essential business operations critical to NSF's administrative processes.

Object Classification (in millions of dollars)

Identification code 49-0180-0-1-251	2010 actual	CR	2012 est.
Direct obligations:			
Personnel compensation:			
11.1 Full-time permanent	140	144	148
11.3 Other than full-time permanent	14	13	14
11.5 Other personnel compensation	7	8	7
11.8 Special personal services payments	1	2	2
11.9 Total personnel compensation	162	167	171
12.1 Civilian personnel benefits	38	37	41
21.0 Travel and transportation of persons	7	7	9
23.1 Rental payments	26	26	26
23.3 Communications, utilities, and miscellaneous charges	2	2	2
25.1 Advisory and assistance services	44	39	46
25.2 Other services from non-federal sources	8	7	10
25.3 Other goods and services from federal sources	7	6	8
26.0 Supplies and materials	4	5	5
31.0 Equipment	2	4	5
32.0 Land and structures			35
99.0 Direct obligations	300	300	358
99.0 Reimbursable obligations	5	10	10
99.9 Total new obligations	305	310	368

Employment Summary

Identification code 49-0180-0-1-251	2010 actual	CR	2012 est.
1001 Direct civilian full-time equivalent employment	1,329	1,325	1,365

OFFICE OF THE NATIONAL SCIENCE BOARD

For necessary expenses (including payment of salaries, authorized travel, hire of passenger motor vehicles, the rental of conference rooms in the District of Columbia, and the employment of experts and consultants under section 3109 of title 5, United States Code) involved in carrying out section 4 of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1863) and Public Law 86-209 (42 U.S.C. 1880 et seq.), \$4,840,000: Provided, That not to exceed \$2,500 shall be available for official reception and representation expenses.

Note.—A full-year 2011 appropriation for this account was not enacted at the time the budget was prepared; therefore, this account is operating under a continuing resolution (P.L. 111-242, as amended). The amounts included for 2011 reflect the annualized level provided by the continuing resolution.

Program and Financing (in millions of dollars)

Identification code 49-0350-0-1-251	2010 actual	CR	2012 est.
Obligations by program activity:			
0001 Direct program activity	5	5	5
Budgetary Resources:			
Budget authority:			
Appropriations, discretionary:			
1100 Appropriation	5	5	5
1930 Total budgetary resources available	5	5	5
Change in obligated balance:			
Obligated balance, start of year (net):			
3000 Unpaid obligations, brought forward, Oct 1 (gross)	2	2	2
3030 Obligations incurred, unexpired accounts	5	5	5
3040 Outlays (gross)	-5	-5	-6
Obligated balance, end of year (net):			
3090 Unpaid obligations, end of year (gross)	2	2	1
Budget authority and outlays, net:			
Discretionary:			
4000 Budget authority, gross	5	5	5
Outlays, gross:			
4010 Outlays from new discretionary authority	3	4	4
4011 Outlays from discretionary balances	2	1	2
4020 Outlays, gross (total)	5	5	6
4180 Budget authority, net (total)	5	5	5
4190 Outlays, net (total)	5	5	6

This appropriation provides policy-making and related responsibilities for NSF and provides guidance on significant national policy issues in science and engineering research and education, as required by law.

Object Classification (in millions of dollars)

Identification code 49-0350-0-1-251	2010 actual	CR	2012 est.
Direct obligations:			
11.1 Personnel compensation: Full-time permanent	2	2	2
12.1 Civilian personnel benefits	1	1	.....
21.0 Travel and transportation of persons .....	.....	.....	1
25.1 Advisory and assistance services	2	2	2
99.9 Total new obligations	5	5	5

Employment Summary

Identification code 49-0350-0-1-251	2010 actual	CR	2012 est.
1001 Direct civilian full-time equivalent employment	19	17	18

OFFICE OF INSPECTOR GENERAL

For necessary expenses of the Office of Inspector General as authorized by the Inspector General Act of 1978, as amended, \$15,000,000, to remain available until September 30, 2013.

Note.—A full-year 2011 appropriation for this account was not enacted at the time the budget was prepared; therefore, this account is operating under a continu-

ing resolution (P.L. 111-242, as amended). The amounts included for 2011 reflect the annualized level provided by the continuing resolution.

Program and Financing (in millions of dollars)

Identification code 49-0300-0-1-251	2010 actual	CR	2012 est.
Obligations by program activity:			
0001 Direct program activity	14	16	15
Budgetary Resources:			
Unobligated balance:			
1000 Unobligated balance brought forward, Oct 1	2	2	.....
Budget authority:			
Appropriations, discretionary:			
1100 Appropriation	14	14	15
1930 Total budgetary resources available	16	16	15
Memorandum (non-add) entries:			
1941 Unexpired unobligated balance, end of year	2	.....	.....
Change in obligated balance:			
Obligated balance, start of year (net):			
3000 Unpaid obligations, brought forward, Oct 1 (gross)	3	4	5
3030 Obligations incurred, unexpired accounts	14	16	15
3040 Outlays (gross)	-13	-15	-14
Obligated balance, end of year (net):			
3090 Unpaid obligations, end of year (gross)	4	5	6
Budget authority and outlays, net:			
Discretionary:			
4000 Budget authority, gross	14	14	15
Outlays, gross:			
4010 Outlays from new discretionary authority	12	11	12
4011 Outlays from discretionary balances	1	4	2
4020 Outlays, gross (total)	13	15	14
4180 Budget authority, net (total)	14	14	15
4190 Outlays, net (total)	13	15	14

This appropriation provides agency-wide audit and investigative functions to identify and correct management and administrative deficiencies which create conditions for existing or potential instances of fraud, waste, and mismanagement consistent with the Inspector General Act of 1978, as amended (5 U.S.C. App. 3).

Object Classification (in millions of dollars)

Identification code 49-0300-0-1-251	2010 actual	CR	2012 est.
Direct obligations:			
11.1 Personnel compensation: Full-time permanent	9	9	9
12.1 Civilian personnel benefits	2	2	3
25.2 Other services from non-federal sources	3	5	3
99.9 Total new obligations	14	16	15

Employment Summary

Identification code 49-0300-0-1-251	2010 actual	CR	2012 est.
1001 Direct civilian full-time equivalent employment	76	73	84

EDUCATION AND HUMAN RESOURCES

For necessary expenses in carrying out science, mathematics and engineering education and human resources programs and activities pursuant to the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-1875), including services as authorized by 5 U.S.C. 3109, authorized travel, and rental of conference rooms in the District of Columbia, \$911,200,000, to remain available until September 30, 2013.

Note.—A full-year 2011 appropriation for this account was not enacted at the time the budget was prepared; therefore, this account is operating under a continuing resolution (P.L. 111-242, as amended). The amounts included for 2011 reflect the annualized level provided by the continuing resolution.

Program and Financing (in millions of dollars)

Identification code 49-0106-0-1-251	2010 actual	CR	2012 est.
Obligations by program activity:			
0001 Undergraduate education	292	292	295
0002 Graduate education	197	182	192
0003 Human resource development	157	157	160
0004 Research on learning in formal and informal settings	242	242	264
0091 Subtotal Appropriated Activities	888	873	911
0101 Low income scholarship program	76	115	75
0102 ITESST grants for mathematics, science, or engineering enrichment courses	21	35	25
0191 Subtotal Mandatory H-1B Non-Immigrant Petitioner Fee Activities	97	150	100
0200 Total direct obligations	985	1,023	1,011
0799 Total direct obligations	985	1,023	1,011
0801 Reimbursable programs	6	15	15
0900 Total new obligations	991	1,038	1,026
Budgetary Resources:			
Unobligated balance:			
1000 Unobligated balance brought forward, Oct 1	68	50	.....
1021 Recoveries of prior year unpaid obligations	4	.....	.....
1050 Unobligated balance (total)	72	50	.....
Budget authority:			
Appropriations, discretionary:			
1100 Appropriation	873	873	911
1120 Appropriations transferred to other accounts	-87	.....	.....
1121 Appropriations transferred from other accounts	87	.....	.....
1160 Appropriation, discretionary (total)	873	873	911
Appropriations, mandatory:			
1201 Appropriation (special fund)	91	100	100
Spending authority from offsetting collections, discretionary:			
1700 Collected	3	15	15
1701 Change in uncollected payments, Federal sources	3	.....	.....
1750 Spending auth from offsetting collections, disc (total)	6	15	15
1900 Budget authority (total)	970	988	1,026
1930 Total budgetary resources available	1,042	1,038	1,026
Memorandum (non-add) entries:			
1940 Unobligated balance expiring	-1	.....	.....
1941 Unexpired unobligated balance, end of year	50	.....	.....
Change in obligated balance:			
Obligated balance, start of year (net):			
3000 Unpaid obligations, brought forward, Oct 1 (gross)	1,801	1,895	1,837
3010 Uncollected pymts, Fed sources, brought forward, Oct 1	-8	-7	-7
3020 Obligated balance, start of year (net)	1,793	1,888	1,830
3030 Obligations incurred, unexpired accounts	991	1,038	1,026
3040 Outlays (gross)	-881	-1,096	-1,029
3050 Change in uncollected pymts, Fed sources, unexpired	-3	.....	.....
3051 Change in uncollected pymts, Fed sources, expired	4	.....	.....
3080 Recoveries of prior year unpaid obligations, unexpired	-4	.....	.....
3081 Recoveries of prior year unpaid obligations, expired	-12	.....	.....
Obligated balance, end of year (net):			
3090 Unpaid obligations, end of year (gross)	1,895	1,837	1,834
3091 Uncollected pymts, Fed sources, end of year	-7	-7	-7
3100 Obligated balance, end of year (net)	1,888	1,830	1,827
Budget authority and outlays, net:			
Discretionary:			
4000 Budget authority, gross	879	888	926
Outlays, gross:			
4010 Outlays from new discretionary authority	106	137	143
4011 Outlays from discretionary balances	661	804	754
4020 Outlays, gross (total)	767	941	897
Offsets against gross budget authority and outlays:			
Offsetting collections (collected) from:			
4030 Federal sources	-7	-15	-15
Additional offsets against gross budget authority only:			
4050 Change in uncollected pymts, Fed sources, unexpired	-3	.....	.....
4052 Offsetting collections credited to expired accounts	4	.....	.....
4060 Additional offsets against budget authority only (total)	1	.....	.....
4070 Budget authority, net (discretionary)	873	873	911
4080 Outlays, net (discretionary)	760	926	882
Mandatory:			
4090 Budget authority, gross	91	100	100

Outlays, gross:			
4100 Outlays from new mandatory authority	11	11	11
4101 Outlays from mandatory balances	114	144	121
4110 Outlays, gross (total)	114	155	132
4180 Budget authority, net (total)	964	973	1,011
4190 Outlays, net (total)	874	1,081	1,014

Education and Human Resources (EHR) activities provide a comprehensive set of programs that further NSF's goal of ensuring a diverse, competitive, and globally engaged U.S. science, technology, engineering, and mathematics (STEM) workforce, as well as scientifically literate citizens. At the pre-kindergarten through grade 12 (pre-K-12) levels, EHR catalyzes reform of STEM education through the development of public-private partnerships. Its pre-K-12 programs provide new instructional materials for students and teachers that incorporate the latest advances in teaching, learning, and educational technologies; growth in the knowledge base; and teacher education opportunities that support the full continuum of STEM teacher education from pre-service and in-service, through life-long learning. Undergraduate programs improve curricula, strengthen laboratory course offerings, enhance faculty, and lead reform efforts in STEM disciplines. Programs for advanced technological education strengthen education for students preparing to enter the high-technology workforce. Graduate level support is directed primarily to fellowships and traineeships to sustain the U.S. world leadership in science and technology. All EHR programming focuses on broadening participation of groups underrepresented in STEM fields including activities focused on the improvement of infrastructure and academic programs at minority-serving institutions. EHR supports education research that advances our knowledge of how people learn in the STEM disciplines; it also supports the development and effective implementation of learning technologies. STEM evaluation activities ensure accountability by developing indicators that measure program impact and inform the education community of best practices and relevant information. EHR activities also include programs supported by H-1B non-immigrant visa fees. These programs provide undergraduate and graduate scholarships in STEM fields, improve educational opportunities for students, and support for STEM education by providing research opportunities for STEM teachers and students.

Object Classification (in millions of dollars)

Identification code 49-0106-0-1-251	2010 actual	CR	2012 est.
Direct obligations:			
21.0 Travel and transportation of persons	4	3	3
25.1 Advisory and assistance services	33	29	29
25.2 Other services from non-federal sources	3	2	2
41.0 Grants, subsidies, and contributions	945	989	977
99.0 Direct obligations	985	1,023	1,011
99.0 Reimbursable obligations	6	15	15
99.9 Total new obligations	991	1,038	1,026

Trust Funds

DONATIONS

Special and Trust Fund Receipts (in millions of dollars)

Identification code 49-8960-0-7-251	2010 actual	CR	2012 est.
0100 Balance, start of year	1	.....	.....
Adjustments:			
0191 Rounding adjustment	-1	.....	.....
0199 Balance, start of year .....	.....	.....	.....

DONATIONS—Continued
Special and Trust Fund Receipts—Continued

Identification code 49–8960–0–7–251	2010 actual	CR	2012 est.
Receipts:			
0220 Donations, National Science Foundation	55	25	25
0299 Total receipts and collections	55	25	25
0400 Total: Balances and collections	55	25	25
Appropriations:			
0500 Donations	–55	–25	–25
0599 Total appropriations	–55	–25	–25
0799 Balance, end of year			

Program and Financing (in millions of dollars)

Identification code 49–8960–0–7–251	2010 actual	CR	2012 est.
Obligations by program activity:			
0001 Atacama Large Millimeter Array	4	30	10
0002 Gemini Telescope	17	19	15
0003 B&M Gates Foundation	4	15	
0004 US Civilian Research	19	7	
0900 Total new obligations	44	71	25

Budgetary Resources:

Unobligated balance:			
1000 Unobligated balance brought forward, Oct 1	35	46	
Budget authority:			
Appropriations, mandatory:			
1202 Appropriation (trust fund)	55	25	25
1930 Total budgetary resources available	90	71	25
Memorandum (non-add) entries:			
1941 Unexpired unobligated balance, end of year	46		

Change in obligated balance:

Obligated balance, start of year (net):			
3000 Unpaid obligations, brought forward, Oct 1 (gross)	44	34	46
3030 Obligations incurred, unexpired accounts	44	71	25
3040 Outlays (gross)	–54	–59	–25
Obligated balance, end of year (net):			
3090 Unpaid obligations, end of year (gross)	34	46	46

Budget authority and outlays, net:

Mandatory:			
4090 Budget authority, gross	55	25	25
Outlays, gross:			
4100 Outlays from new mandatory authority		25	25
4101 Outlays from mandatory balances	54	34	
4110 Outlays, gross (total)	54	59	25
4180 Budget authority, net (total)	55	25	25
4190 Outlays, net (total)	54	59	25

This account consists of contributions from foreign governments, organizations, and individuals to fund various cooperative efforts in science, research, and education. These efforts include major international projects, such as operation of the GEMINI telescope, and the NSF ocean drilling program. Other smaller activities supported include cooperative research, joint seminars, exchange of senior scientists, short-term research development visits, international conferences, and support for certain special functions of NSF and the National Science Board. These funds are not otherwise available.

Object Classification (in millions of dollars)

Identification code 49–8960–0–7–251	2010 actual	CR	2012 est.
Direct obligations:			
25.4 Operation and maintenance of facilities	9	9	9
41.0 Grants, subsidies, and contributions	35	62	16
99.9 Total new obligations	44	71	25

GENERAL FUND RECEIPT ACCOUNT

(in millions of dollars)

	2010 actual	CR	2012 est.
Offsetting receipts from the public:			
49–32200 All Other General Fund Proprietary Receipts Including Budget Clearing Accounts	1	2	2
General Fund Offsetting receipts from the public	1	2	2